

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in this application:

Claims 1-30. (Cancelled)

31. (Currently Amended) A pharmaceutical composition for bone elongation or treating skeletal dysplasias comprising at least one natriuretic peptide variant, ~~the peptide being~~ set forth in SEQ ID NO:5 wherein Xaa=Leu, Ile, Val; Xbb=Lys, Leu, Met; Xcc=Leu, Ile, Ala, Val; Xdd=Ser, Ala, Gly, Thr, Asn; Xee=~~Met~~, Ala, Trp, His, Lys, Ser, Gly; Xff=Gly, Lys, Ala, Leu; and Xgg=Leu, Met, and a carrier or excipient, wherein SEQ ID NO:5 is other than amino acid sequence set forth in SEQ ID NO:2.

Claims 32-35. (Cancelled)

36. (Original) The pharmaceutical composition according to claim 31 further comprising an inhibitor of the natriuretic peptide clearance receptor.

37. (Original) The pharmaceutical composition according to claim 31 further comprising an inhibitor of the neutral endopeptidase 24.11.

38. (Original) The pharmaceutical composition according to claim 37 wherein the inhibitor of neutral endopeptidase 24.11 is thiorphan or candoxatril.

39. (Previously Presented) The pharmaceutical composition according to claim 31 further comprising an inhibitor of fibroblast growth factor receptor 3 tyrosine kinase.

40. (Currently Amended) ~~[[A]]~~The pharmaceutical composition according to claim 31 wherein the ~~comprising a~~ natriuretic peptide is fused to a carrier protein forming a natriuretic peptide-carrier protein fusion protein; wherein the carrier protein is a ~~bone growth plate-specific protein~~ selected from the group consisting of growth hormone (GH), insulin like growth factor-1 (IGF-1) and thyroid hormone (TH).

41. (Original) The pharmaceutical composition according to claim 40 wherein the carrier protein comprises growth hormone.

42. (Previously Presented) The pharmaceutical composition according to claim 40 wherein said at least one natriuretic peptide is conjugated to a carrier protein forming a natriuretic peptide-carrier protein conjugate.

Claims 43-66. (Cancelled)

67. (Withdrawn, Currently Amended) A method for increasing the size of a bone growth plate in ~~abnormal~~ a bone comprising treating the bone in vitro with an effective amount of at least one natriuretic peptide in a pharmaceutical composition according to claim 31.

Claims 68-71. (Cancelled)

72. (Withdrawn) The method according to claim 67 further comprising inhibiting the natriuretic peptide clearance receptor.

73. (Withdrawn) The method according to claim 67 further comprising an inhibitor of the neutral endopeptidase 24.11.

74. (Withdrawn) The method according to claim 73 wherein the inhibitor of neutral endopeptidase 24.11 is thiorphan or candoxatril.

75. (Withdrawn) The method according to claim 74 wherein the step of administering an inhibitor of neutral endopeptidase is performed simultaneously with the step of administering an effective amount of at least one natriuretic peptide.

76. (Withdrawn, Currently Amended) The method according to claim 67 further comprising an inhibitor of fibroblast growth factor receptor 3 tyrosine kinase.

77. (Withdrawn, Currently Amended) The method according to claim 68 wherein said at least one natriuretic peptide is fused to a carrier protein forming a natriuretic peptide-carrier protein fusion protein wherein the carrier protein is selected from the group consisting of growth hormone (GH), insulin like growth factor-1 (IGF-1) and thyroid hormone (TH).

78. (Withdrawn) The method according to claim 77 wherein the carrier protein fusion protein comprises growth hormone.

79. (Withdrawn) The method according to claim 67 wherein said at least one natriuretic peptide is conjugated to a carrier protein forming a natriuretic peptide-carrier protein conjugate.

80. (Withdrawn) The method according to claim 67 wherein the bone is a limb bone.

81. (Withdrawn) The method according to claim 80 wherein the limb bone is an achondroplastic bone.

82. (Withdrawn, Currently Amended) A method for elongation of an ~~abnormal~~ bone, comprising treating the bone in vitro with an effective amount of at least one natriuretic peptide in a pharmaceutical composition according to claim 31.

Claims 83-86. (Cancelled)

87. (Withdrawn) The method according to claim 82 further comprising inhibiting the natriuretic peptide clearance receptor.

88. (Withdrawn) The method according to claim 82 further comprising an inhibitor of the neutral endopeptidase 24.11.

89. (Withdrawn) The method according to claim 88 wherein the inhibitor of neutral endopeptidase 24.11 is thiorphan or candoxatril.

90. (Withdrawn) The method according to claim 88 wherein the step of administering an inhibitor of neutral endopeptidase is performed simultaneously with the step of administering an effective amount of at least one natriuretic peptide.

91. (Withdrawn, Currently Amended) The method according to claim 82 further comprising an inhibitor of fibroblast growth factor receptor 3 tyrosine kinase.

92. (Withdrawn) The method according to claim 82 wherein said at least one natriuretic peptide is a natriuretic peptide fused to a carrier protein forming a natriuretic peptide-carrier protein fusion protein.

93. (Withdrawn) The method according to claim 92 wherein the carrier protein comprises growth hormone.

94. (Withdrawn, Currently Amended) The method according to claim 82 wherein said at least one natriuretic peptide is conjugated to a carrier protein forming a natriuretic peptide-carrier protein conjugate; wherein the carrier protein is selected from the group consisting of growth hormone (GH), insulin like growth factor-1 (IGF-1) and thyroid hormone (TH).

95. (Withdrawn, Currently Amended) The method according to claim 82 wherein the bone is a limb ~~[[bon3]]~~bone.

96. (Withdrawn) The method according to claim 82 wherein the limb bone is an achondroplasic bone.